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### (54) MAGNETIC RECORDING MEDIUM SUBSTRATE

#### (57)Abstract:

PROBLEM TO BE SOLVED: To easily optimize the annular projection by maintaining a 'contact area parameter' of a medium substrate within the range smaller than the 'contact area parameter criterion value' in which a frictional vibration between slider and medium substrate rapidly increases.

SOLUTION: An annular projection is provided within a contact start stop zone of a magnetic storage medium substrate on which a slider takes off and makes landing. When the annular projection is formed annularly, the 'contact area parameter criterion value' has a particular value corresponding to the annular diameter. The contact area of slider is related to the absorption phenomenon between the slider and medium substrate, giving an influence on the sliding phenomenon of slider during the CSS operation. The contact area of slider can be expressed using the 'contact area parameter' of the medium substrate expressed with (annular circumference length of annular projection × annular projection density per unit area of medium substrate × radius of curvature of the annular projection end)<sup>0.5</sup>. When the contact area parameter is smaller than the contact area parameter criterion value, friction vibration becomes small.

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